

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/656,352	09/06/2000	Richard Russell Lattime	GT-4722	2642

7590

08/25/2003

Robert F. Rywalski, Esq
Assistant Secretary and Chief Patent Counsel
Omnova Solutions
175 Ghent Road
Fairlawn, OH 44333-3300

EXAMINER

JUSKA, CHERYL ANN

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 08/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/656,352

Applicant(s)

LATTIME ET AL.

Examiner

Cheryl Juska

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,16,17,21-27 and 35-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,16,17,21-27 and 35-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Amendment C, submitted as Paper No. 10 on January 29, 2003, has been entered. Claim 2 has been amended, while claims 3 and 28-34 have been cancelled. New claims 25-46 have been added. Thus, the pending claims are 2, 16, 17, 21-27, and 35-46, with claims 2, 21, and 40 being independent claims.

2. Amendment C is sufficient to withdraw the prior art rejections set forth in sections 3-5. however, new rejections are set forth below for claims 2, 16, and 17, as well as for claims 21-27, which were previously indicated as containing allowable subject matter.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 37, 41, and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 37 is indefinite because it is unclear if the rosin acid soap as the emulsifier is the same or in addition to the rosin acid soap of claim 2.

6. There is a lack of antecedent basis for the recitation of "the carpet latex compound" of claims 41 and 42.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 40-42, 45, and 46 are rejected under 35 USC 103(a) as being unpatentable over US 3,988,275 issued to Satake in view of US 3,632,466 issued to Peaker.

Claim 40 is drawn to a carpet comprising (a) a backing, (b) a pile bonded to said backing by a latex admixture of (i) a carboxylated styrene-butadiene rubber, (ii) about 0.25-0.2 pbw rosin acid soap phr, and (iii) about 250-800 pbw filler phr. Claims 41 and 42 limit the latex to further include (iv) about 0.2-6 pbw emulsifier phr and (v) about 0.1-5 pbw thickener phr, respectively. Claim 45 limits the rubber to being cross-linked. Claim 46 limits the rosin acid soap to being present in an amount of about 0.5-1 pbw phr.

Satake discloses a synthetic rubber latex, such as a styrene-butadiene rubber latex, comprising two emulsifying agents (abstract). The first emulsifying agent is a higher fatty acid or salt thereof, a rosin acid or salt thereof, or a disproportioned rosin acid or salt thereof and the second emulsifying agent is a compound defined by a given formula (abstract). Suitable first emulsifying agents include the fatty acid salt soaps or rosin acid soaps, such as potassium oleate, sodium laurate, potassium palmitate, and sodium rosinate (col. 2, lines 48-55). The first emulsifying agent is present in an amount of 1-8 pbw phr, while the second is present in an amount of 2-8 pbw phr (col. 6, lines 43-52 and col. 7, lines 27-37). The viscosity of the latex may be adjusted by the addition of a thickener (col. 8, lines 59-65). Other conventional

Art Unit: 1771

additives, such as an inorganic filler and a zinc oxide vulcanization (i.e., cross-link) curative, may also be added (col. 9, lines 1-3, 15-20, and 46-47). The latex is suited for use as a carpet sizing agent (i.e., a latex coating or back-size for bonding pile tufts into a primary backing) (col. 2, lines 10-18).

Thus, Satake teaches the invention of claims 40-42, 45, and 46 with the exception of (a) the styrene-butadiene rubber being carboxylated, (b) the amount of filler, and (c) the amount of thickener. However, these features are well-known in the art of carpet back-sizes. For example, Peaker discloses a latex coating composition for coating a tufted backing (abstract and col. 1, lines 5-14). Said latex may include a calcium carbonate filler in the amount ranging from 100-1000 pbw phr (col. 2, lines 11-30). A thickener may also be added in an amount of 1.0-2.0 pbw phr for controlling the viscosity of the latex (col. 2, lines 36-41). The latex may be a styrene-butadiene rubber comprising 30-70% styrene and 30-70% butadiene that is carboxylated with 0.5-5% of a carboxylic acid (col. 4, lines 68-74). In one embodiment, the latex comprises 40 parts butadiene, 59 parts styrene, and 1 part itaconic acid (col. 6, lines 28-30).

Hence, it would have been obvious to one of ordinary skill in the art to carboxylate the styrene-butadiene latex of Satake as taught by Peaker in order to enhance the cross-linking of the rubber. Additionally, since Satake is silent with respect to the amount of filler and thickener, one must look to the prior art, such as Peaker, for guidance. It would have been obvious to one skilled in the art to employ the amounts presently claimed since Peaker teaches said amounts as being conventional in the art of carpet back-sizes.

9. Claims 2, 16, 17, 35-39, and 43 are rejected under 35 USC 103(a) as being unpatentable over the cited Satake and Peaker patents.

Art Unit: 1771

The limitations of claim 2 are analogous to those of claims 40-42 combined, with the exception that the amount range of the rosin acid soap is broader in claim 2. Claims 35 and 36 limit the amount of rosin acid soap to that recited in claims 40 and 46, respectively. Claims 16 and 17 limit the rosin acid soap to being a potassium, sodium, or lithium rosin acid soap and the filler to calcium carbonate. Additionally, claim 16 limits the carboxylated styrene-butadiene rubber to comprise 52-69.5% styrene, 30-45% butadiene, and 1% itaconic acid, while claim 17 limits the ranges to 58-63.4%, 35-40%, and 1.6%, respectively. Claim 37 limits the emulsifier to being rosin acid soap. Claims 38 and 39 limit the amount of emulsifier to 1-5 and 2-4 pbw phr, respectively. Claim 43 is analogous to claim 45.

As argued above, the combination of Satake and Peaker clearly teaches the invention of claims 2, 16, 17, 35-39, and 43. As such, said claims are rejected for reasons analogous to those presented above in section 8.

10. Claims 21-27 are rejected under 35 USC 103(a) as being unpatentable over the cited Satake and Peaker patents.

Claim 21 differs from claim 2 in that a curative is optionally present. The limitations of claims 22, 24-27, and 44 are analogous to those presented in claims 16, 17, 46, and 45. Hence, claims 21, 22, 24-27, and 44 are rejected for reasons analogous to those presented above. With respect to claim 23, which limits the latex to further include a zinc oxide curative, it is reiterated that Satake teaches a zinc oxide curative. Thus, claim 23 is also rejected.

Art Unit: 1771

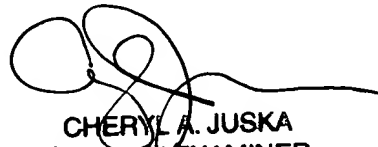
Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


CHERYL A. JUSKA
PRIMARY EXAMINER

cj
August 10, 2003